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affect the population far more than what Captain Larcom supposes, that, in the most marrying communities, many will enter into matrimony who are not much fitted for reproduction. The marriages of elderly people, on the contrary, are likely to be most frequent where the sexual passion has been most restrained in youth, and prudential habits have been formed. Nor does experience confirm the theory, which Captain Larcom has derived from some Belgian publication. I have not looked at that; but it is certainly an admitted fact, that the ratio of marriages to the population is higher in the United States than in Europe. But the "cypher of fecundity" there, if I remember right, is above 6; while, if the inverse ratio were true, it ought to be lower than in any European state; or not much more perhaps than 3; a supposition, independently of direct evidence to the contrary, incompatible with the rapid progress of American population.

It is unnecessary to add that I am obliged to Captain Larcom for the courtesy of his expressions, and hope that we shall reap much benefit from the investigation which he promises to pursue.

I remain, my dear Sir,
Very faithfully, yours,
Joseph Fletcher, Esq. HENRY HALLAM.

Adaptation of Official Returns of Railway Traffic to the general purposes of Statistical Inquiry. By W. A. GRAHAM, Esq., F.S.S.

[*Read before the Statistical Society of London,* 21*st April,* 1845.]

IT has long been my opinion that a series of tables, carefully and systematically compiled from returns furnished by the Government, from the shipping and landing entries of docks and harbours, and from other accessible sources, might, under the auspices of this Society, render important service to the public by throwing light upon the condition and employment of the population of different places, and upon the state and variation of local trade. My opinion of the value of such a series of tables was confirmed by the suggestion contained in a passage which occurs in the paper on Railway Statistics contributed by G. R. Porter, Esq., and read before the Society on the 15th April last. While regretting the insufficiency of the returns made by the Railway Companies to the Board of Trade, for the deduction of satisfactory results in reference to the average distances travelled by the passengers on the various lines, Mr. Porter observes:—"It may hereafter be possible, by explanation, to induce the companies so to keep their accounts as to make this return with accuracy, so that data may be obtained whereby to compare one year with another, and one part of the kingdom with another, in regard to this very significant indication of the national progress." I cannot more concisely express the object with which I have constructed the tables I now submit to the Society, than by borrowing the words of the above quotation: "to compare one year with another, and one part of the kingdom with another," and I have availed myself of the official railway returns for the illustration of my views, on account of the facilities afforded for consulting them in one collected mass, and the superior importance conferred upon them by the increasing prevalence of the railway system, which gives promise shortly to pervade every portion of the kingdom. The basis of the argument for the utility of these tables as applied to general statistical purposes is, that all the surplus* produce of labour must be conveyed to its market or locality of consumption. Common roads will soon be superseded, except for very short distances, by railways as the means of such conveyance, and there can be no doubt that a well-digested system of tabulating the traffic of so large a portion of the produce of the land and labour as must pass through the hands of railway companies, would furnish the most important information on the state and variation of local trade throughout the kingdom. The members of this Society need not to be reminded of the value of such information in the hands of the legislator and the skilful statist; nor is it to be apprehended, on the other hand, that they will attach to it more than its due value. Many circumstances will make it necessary to correct and modify the information thus obtained by facts derived from other sources; and the greater the number of those sources we have opportunities of consulting, the more nearly we shall approximate, by comparing them with the railway tables, to a clear view of the condition of any particular locality. Amongst the sources here alluded to, one of the most obviously desirable is an account of the traffic on canals, and although the obstacles in the way of obtaining it are confessedly great, it is to be hoped that, in proportion as the important influence of statistical inquiry on the well-being of the community becomes appreciated, an account may be obtained of so much of the canal traffic, pertaining to the transport of large quantities of goods of one kind, as would furnish materials for tabulation on a system similar to that which is here recommended for the official returns of railways. Notwithstanding, however, that a comparison of railway and canal traffic may be most important in reference to the whole trade of a particular place, they will probably, at a future time, become, in some measure, independent of each other in reference to certain articles of commerce of which *large quantities* are conveyed, and which could be tabulated in some such form as that shown in the accompanying tables. Live stock, for instance, forms no part of canal traffic, and it is probable that the transport of woven manufactures, the value of which bears a large proportion to their weight, may ultimately be entirely transferred from the canals to the railways, the latter mode of conveyance complying with the desirable and often necessary condition of speedy delivery. The canals, on the other hand, will retain a large portion of the traffic in weighty and cumbrous goods, of which the value bears so small a proportion to their weight and bulk, that conveyance by railway would materially affect their price. The trader will also find his account in saving the difference of rates by transmitting through the canal companies many other articles of which the speedy delivery is not a material desideratum. Tables compiled from the shipping and landing entries of docks and harbours would also, when compared with the railway tables, throw light on the trade of the seaport towns, and that of the places with which they are connected by railway.

Meanwhile, the absence of tabulated matter derived from such sources has not discouraged me from suggesting the commencement of a system by the conversion of the materials more conveniently within our reach. It is true that, for some purposes, the value of the tables will be but small, so long as they are uncorroborated by other evidence; but even though we were unable to deduce any satisfactory result from the actual numbers exhibited by the tables, their variations would indicate, in a very striking manner, the operation of causes, the nature of which we should, by these indications, be led more particularly to investigate. At the same time, our knowledge of the present imperfect state of the returns would put us on our guard against drawing hasty conclusions. Notwithstanding, however, the imperfect state of the materials, it is hoped that a cursory examination of the tables compiled from them will be sufficient to show that they may be made available for the purposes suggested. It is also anticipated that an examination of these tables may be serviceable in assisting to form an estimate, by analogy of circumstances, of the probable traffic of a projected line, and of its effect upon the places on or near its course. It is presumed that a convenient form of reference to the experience of the past will become every day of greater value for modifying the rules hitherto adopted in making estimates for new lines, and that as the railway system becomes extended over the whole country, the tables will exhibit very decidedly, when carried over a series of years, the fluctuations caused by the stimulus given to local trade, and by the counteraction of new competing lines.*

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* The term "surplus" must here be taken as the excess of produce beyond its consumption in or very near the locality of production.

The plan here recommended, and which it is attempted to illustrate by the accompanying tables, is such an analysis of the returns as will furnish, in addition to the table of receipts and the passenger table, materials for the construction of a separate table for any article of consumption conveyed in large quantities. I have been enabled to extract materials for the tables here described, and I have in many instances supplied their deficiencies by calculating the results in a manner which will be explained in the description.

No. 1 is a table of the gross receipts of 66 railways. Of this number 49 are on four half-yearly returns ending 30th June, 1843; 5 are on three returns; and the remaining 12 on two returns. The table contains seven columns, viz., No. 1, the name of the railway; No. 2, the numbers of the returns; Nos. 3 and 4, the per centage proportions of passenger traffic and goods traffic; Nos. 5 and 6, the gross receipts of passenger and goods traffic; and No. 7, the total gross receipts. The value of the columns of proportions, independently of their fitness to convey a ready and correct idea of the commercial character of a railway, consists in their indication of considerable changes. Wherever such changes in the proportions meet the eye, the columns of actual receipts may be consulted for information as to whether the change of proportions is due to an increase or decrease of passenger or goods traffic, to an increase of the one and a decrease of the other, or to an increase or decrease of both in different proportions. Wherever the proportions appear to be stationary, the column of totals will show the increase or decrease, if any, of the whole. These returns are, in fact, the third, fourth, fifth, and sixth returns made to the Board of Trade under the powers conferred by Lord Seymour's Act, but the first two (1st July to 31st December, 1840, and 1st January to 30th June, 1841) are so imperfect, that I find them quite unmanageable for the purpose of tabulation. The figures 1, 2, 3, 4, in column No. 2, indicate the first, second, third, and fourth returns, and as their use is to avoid a repetition of dates, the blank spaces opposite to the corresponding number of the return point out those lines of which the returns commence only at the second or third half-year, dating from the 1st July, 1841, as a commencement for the tables. In a few instances of defective returns, the sums of the fifth and sixth columns have not been carried out to the column of totals. The receipts for horses and carriages and passengers' luggage have been included in the receipts for passengers, as it is considered that they make one of the expectations of a passenger traffic, and are generally proportional to the quantity of first-class passenger traffic. Table No. 2 is intended to show the number of passengers of each class conveyed on railways, the average distance, and the rate of fare per mile, the figures indicating the dates of the returns being applied in the same manner throughout all the tables as in No. 1. Table No. 3 is of the same form as No. 2, showing the numbers, average distances, and rates of charge per mile for horses and carriages, and in like manner, Tables Nos. 4, 5, 6, and 7, show the results in the transport of coals, cattle, sheep, and pigs. The passenger table includes 60 railways. In this table, as well as in the succeeding numbers, the average distances have been calculated from the mileage and the numbers conveyed. In some instances, however, the mileage is not supplied in the returns, but in those cases where the rates and separate receipts are given, they have been taken as the elements of the calculation; the distances so calculated are noted in the tables, but as the rates are in many cases given to several places of decimals, it was considered that the results would sufficiently approximate to the truth for the purposes of the table.

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* A new line may compete with an old one for part of the traffic of their common terminus, by opening new markets for its produce, although in an opposite direction.

In two or three cases only, where the numbers carried on a railway made it too important to be excluded from the tables, a rate has been *assumed* for calculating the distances, the rates and mileage not being furnished in the returns. Those distances are accordingly noted in the tables to be taken as approximations, answering the purpose of indices of variation.

An examination of the average distances of the passenger table shows that, in general, the distances of first class passengers are longer than those of the second, and the second longer than those of the third. The most remarkable exception to this rule appears in the distances travelled by third-class passengers on the Grand Junction. During the two halves of the year ending 30th June, 1843, while the first class travelled 59·41 and 59·58 miles, and the second class 37·79 and 36·35, the distances travelled by the third class were 73·55 and 76·68 miles, or nearly the whole length of the line. The line is virtually 97·5 miles in length, although it terminates at the junction with the Liverpool and Manchester line at Newton. The same kind of exception appears on the South-Western, the first class varying, over two years, from 38·21 to 42·35, the second from 26·08 to 29·07, while the third class ranges from 55·18 to 59·24. On the Great Western the third class distances are very nearly equal to the first class, and would probably exceed them on the main line between London and Bristol. The returns, however, include the traffic of the Cheltenham and Great Western Union, and of the Bristol and Exeter lines. These exceptions to the general law indicate the existence of a regular current of third class traffic between London and the ports of Liverpool, Bristol, Southampton, and Portsmouth, the greater portion of which probably consists of seamen, soldiers, and labourers. This hypothesis appears to be corroborated by the long distances of third-class passengers on the London and Birmingham line. The Board of Trade Report, February 5th, 1842, contains a table in which the average distance travelled by third-class passengers on this line (as calculated from the return ending 1st July, 1841), is 55½ miles. In my tables it ranges from 60·73 to 64·31. With the exception of this and the North Midland, which falls off from 16 miles to 12 or 13, the average distances given for third class on 11 railways do not vary considerably from those of my tables.

The line on which the greatest number of passengers were carried during the period of the four returns was the Great Western. The London and Birmingham, however, surpassed it in the mileage of the first and third classes, and was not far inferior to it in that of the second.

The following is a statement of the per centage variation in the numbers of passengers of each class, and in the money receipts of the Great Western and London and Birmingham lines for the second year as compared with the first year of the tables :—

	First Class.		Second Class.		Third Class.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
Great Western.						
Passengers .	..	2·5	..	4·5	39	..
Money . . .	1·33	..	2·5	..	26	..
London and Birmingham.						
Passengers .	..	6·33	..	2·0	15	..
Money . . .	..	9·0	..	0·08	18	..

The increase in the number of third-class passengers on the South-Western line during the second year of the tables, as compared with the first, is 49 per cent.

Another remarkable feature exhibited by the table is the large quantity of third class short traffic on the Sheffield and Manchester, and the Manchester and Birmingham, and still greater numbers are shown on the Manchester and Leeds, being, from 747,000 persons during the first year, to 794,000 during the second year, carried about 11 miles; the second class of this line also shows about one third of this number carried double the distance. These examples are strong indications of the commercial activity of the population in the neighbourhood of the manufacturing towns. The columns of rates in these tables will probably serve no other purpose for the present than to convey a general idea of the cost of travelling and conveying goods in different parts of the country, but it is also intended that they should be consulted, after a period of some years, in connection with the variations in the numbers and quantities conveyed, in estimating the extent to which these latter may have been affected by the variations in the former. The distances shown in the tables of horses and carriages are remarkable for their regularity, the former being, in most cases, somewhat shorter than the latter, and the ratio of each to the whole length of the several lines being greater than that of any other species of traffic. The distance for horses was, during the two years, upwards of 80 miles on the London and Birmingham, and 62 to 64 miles on the Great Western, the former line carrying the greater number: the Great Western, however, carried a greater number of carriages.

The returns of the Pontop and South Shields Railway commence at

No. 3, and show a greater mileage in the conveyance of coals than any other railway. The number of tons carried during the period from 5th July, 1842, to 2nd July, 1843, was 602,251, an average distance of nearly 15 miles, which is equal to nearly 9,000,000 tons carried one mile. The Durham and Sunderland Railway carried, during the first year of the returns, 387,705 tons, and during the second year, 331,282 tons a distance of 12 miles. On the Newcastle and Carlisle line, 157,591 tons were carried during the first year an average distance of 12·85 miles, and during the second year, 139,336 tons were carried an average distance of 16·68 miles; the falling off in the quantity was more than compensated by the greater average distance of the second year, the total mileage of the second year exceeding that of the first by 16 per cent. The quantity here given for each year is the sum of five different quantities carried different average distances, and in addition to these, the company carried 39,856 chaldrons the first year, and 33,879 chaldrons the second year a distance of about 6½ miles, and from 60,000 to 63,000 chaldrons the short distance of 155 yards. The returns of the Newcastle and Carlisle Railway are admirable specimens of careful analysis, and do great credit to the officers of that Company. On the St. Helen's and Runcorn Gap Railway 158,510 tons were carried the first year, and 191,824 tons during the second, a distance of 8 miles; and 20,954 tons, and 29,836 tons were carried a distance of 2½ miles during the first and second years respectively. The Great North of England shows a traffic of from 84,000 to 85,000 tons per annum carried about 26 miles, and amongst the shorter distances, the Manchester, Bolton, and Bury Railway shows a traffic of about 50,000 tons, and the Maryport and Carlisle, from 60,000 to 70,000 tons per annum, the average distance on each line being about 6½ miles. The coals on the latter line are principally for shipment at Maryport.

The London and Birmingham is the chief line for the conveyance of cattle, upwards of 20,000 having been carried an average distance of nearly 70 miles during the second year of the returns. Considerable numbers are also carried on the Midland Counties, a great feeder of the London and Birmingham. During the first year of the returns, the numbers carried on both these lines were very nearly the same; but during the second year, while the numbers on the London and Birmingham increased considerably, those on the Midland Counties fell off to less than one-half. Cattle are also carried in considerable numbers on the Great North of England, Great Western, and Grand Junction. It is to be regretted that the returns of the North Midland are so imperfect in the account of live stock, that they could not be used for the tables. The number of sheep carried on the Great Western during the first year of the returns was 75,970, and during the second 118,641, over an average distance of about 46 miles. On the London and Birmingham, 91,447 were carried during the first year, and 109,889 during the second year, an average distance of about 60 miles; but the average distance of the numbers carried during the half-year corresponding to the first return, appears to have been upwards of 90 miles, or $\frac{9}{11}$ of the whole length of the line. The numbers conveyed on the York and North Midland during the period of the two returns, from 1st July, 1842, to 30th June, 1843, were 104,403, a distance of about 16 miles. This number is much greater than that shown by any railway joining it. The Manchester and Leeds shows about 50,000 the first year, and 30,000 the second. The Newcastle and Carlisle line shows a steady traffic in sheep during the two years of the returns, the numbers being about 38,000 the first year, and nearly 40,000 the second year of the returns, carried about 40 miles. The South-Western shows a sheep traffic of about 36,000 the first year, and 32,000 the second year, the average distance increasing from 44 to 48 miles.

The lines which are most conspicuous for the transport of pigs are the Grand Junction, the Liverpool and Manchester, and the Manchester and Leeds Railways; the numbers and average distances on these lines clearly indicating the current of distribution, throughout the manufacturing districts, of the great numbers of Irish pigs, shipped principally at Belfast for the port of Liverpool. Many of these are, no doubt, consumed by the population of Liverpool; but we may infer, from the appearance of the tables, that Manchester, Leeds, and many places on the track of the Leeds and Manchester Railway, are the localities of a large consumption,—that a considerable portion is distributed in a more southerly direction towards Stafford, Derby, Nottingham, and other places in the midland counties, and that large numbers find their way to Birmingham.*

During the first year of these returns, 81,796 pigs, and during the second, 129,441, were conveyed over a great portion of the Grand Junction line. No rates are given in the returns of live stock traffic on that line; but even assuming the highest rate in the table, ½*d.* per mile, the average distances during the two years of the returns would appear to be from 50 to upwards of 60 miles. These long average distances, nearly three-fourths of the whole length of the line, would seem to be sufficient warrant for the inference that considerable numbers of the pigs travel to the Birmingham terminus of the line. The numbers conveyed on the Great Western are considerable, and appear to have increased from about 36,000 during the first year, to upwards of 49,000 during the second, the average distances being nearly the same, viz., 47 to 49 miles. The number of pigs conveyed on the London and Birmingham, during the first year of the returns, was only 8,437. There appears, however, an extraordinary increase in the numbers conveyed on that railway during the period of the fourth return, the number being 17,119, while the number for the corresponding half of the preceding year (return No. 2), was only 6,363; the average distance in both cases being, within a very small fraction, the same, viz., No. 2, 57·34; No. 4, 57·43.

Rates.—The average rates of 22 English railways for first-class passengers, on five half-yearly returns, commencing 1st January, 1841, were 2·772*d.*, 2·71*d.*, 2·69*d.*, 2·655*d.*, 2·708*d.* On the last return, 12 were above the average, and 10 below it. The highest charge, 3·47*d.*, was made by the Great North of England, and the lowest, 1·87*d.*, by the Durham Junction.

The average rates on the same 22 lines for second-class passengers, on

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* The number of pigs conveyed during three successive years, commencing 1st July, 1840, was:—on the

Liverpool and Manchester.		Grand Junction.	
First year . . .	75,081	First year . . .	66,694
Second year . .	80,854	Second year . .	81,796
Third year . . .	83,564	Third year . .	129,441

I am indebted to Mr. Withers, the treasurer of the Liverpool Dock Estate, for the information that the number of Irish pigs imported into Liverpool in 1844, was 243,653.

the same five returns, were 1·915*d.*, 1·955*d.*, 1·876*d.*, 1·902*d.*, 1·957*d.* On the last return, 10 were above the average, and 12 below it. The highest rate, 2·7*d.*, was charged by the Eastern Counties, and the lowest, 1·5*d.*, by the Whitby and Pickering.

The average rates for third-class passengers on 16 of the same 22 railways, on the same five returns, were 1·141*d.*, 1·185*d.*, 1·247*d.*, 1·204*d.*, 1·251*d.* On the last return, 5 were above the average, and 11 below it; the highest rate, 1·6*d.*, was made by the Great North of England, and the lowest, 0·9*d.*, by the London and Croydon and the Lancaster and Preston. The Chester and Birkenhead had a *fourth* class, at the rate 0·83*d.*, which was discontinued during the period of the second return of the tables.

As there is but slight variation in the rates for horses and carriages, live stock and coals, over the four returns, an average is taken for the whole period. The average rate for horses, taken on 21 English railways, is 4·14*d.* Of these, 13 are above the average, and 8 below it. The highest charges were made by the Preston and Wyre and the Whitby and Pickering Companies, viz., 5·5*d.* and 5*d.* respectively. The numbers conveyed on these lines were, however, very small. The lowest rate, 2*d.*, was charged by the York and North Midland.

The average rate for carriages taken on the same 21 railways is 7·36*d.* Of these, 10 are above the average, and 11 below it. The highest charge, 10·5*d.*, was made by the Lancaster and Preston, and the lowest, 4*d.*, by the York and North Midland. The Chester and Birkenhead, not included in the average, charged 12*d.* on returns 1 and 2; but had reduced the rate to 8*d.* on 3 and 4. This reduction was not followed, by an increase of traffic.

The average rate for coals is 1·83*d.* per ton per mile, taken on 22 English railways.* Of these, 11 are above the average, and 11 below it. The highest charge, 4*d.*, was made by the Croydon Company, and the lowest, 1*d.*, by the North Union. The Canterbury and Whitstable, not included in the average, charged 9*d.* on returns, Nos. 1, 2, and 3; but reduced the rate to 6*d.* on No. 4.

The average rate for the conveyance of cattle on 9 English railways is 1·53*d.* Of these, 3 are above the average, and 6 below it. The highest rate, 2*d.*, was charged by the Birmingham and Gloucester, and the lowest, 0·9*d.*, by the Newcastle and Carlisle.

The average rate for sheep on 9 English railways is 0·3*d.* Of these, 5 are above, and 4 below the average. The highest rate, 0·4*d.*, was charged by the Birmingham and Gloucester, and the lowest, 0·2*d.*, by the London and Birmingham.

The average rate for pigs on 9 English railways is 0·344*d.* Of these, 4 are above, and 5 below the average. The highest rate, 0·5*d.*, was charged by the Birmingham and Gloucester and the London and South-Western, and the lowest rate, 0·17*d.*, by the Newcastle and Carlisle.

The above averages having been taken on those lines only of which the returns were perfect during two years, the number of lines for each average is small as compared with the number of lines in table No. 1; but as they include the most extensive lines, and are located in all parts of England, the averages may be considered fair.

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* This average is really on 18 lines, but the Newcastle and Carlisle has five sections with different rates. See the Table.

TABLE No. 1.

Name of Railway.	Number of Return.	Per Centage Proportions.		RECEIPTS.								
		Pas-sengers.	Goods.	Passengers.			Goods.			Totals.		
				£.	s	d.	£.	s.	d.	£.	s.	d.
Arbroath and Forfar.	1	43·09	56·91	2,051	12	3½	2,709	15	4½	4,761	7	8
	2	38 99	61·01	1,542	6	7	2,413	3	5½	3,955	10	0½
	3	40·19	59·81	1,707	3	1	2,540	19	1	4,248	2	2
	4	36·24	63·76	1,228	3	4	2,160	14	4	3,388	17	8
Ardrossan.	1	46·83	53·17	1,399	12	3	1,588	16	2	2,988	8	5
	2	37·55	62·45	744	18	3	1,238	15	9	1,983	14	0
	3	42·52	57·48	938	2	0	1,268	3	6	2,206	5	6
	4	37·47	62·53	560	10	4	935	9	0	1,495	19	4
Ballochney.	1	9·76	90·24	661	4	5	6,115	10	11	6,776	15	4
	2	5 55	94·45	390	13	6	6,651	18	2	7,042	11	8
	3	2 63	97·37	139	18	4	5,178	13	2	5,318	11	6
	4	2·13	97·87	111	14	4	5,122	18	6	5,234	12	10
Birmingham and Derby Junction.	1	72·06	27·94	20,693	7	3	8,022	7	8	28,715	14	11
	2	69·47	30·53	17,581	4	0	7,727	12	6	25,308	16	6
	3	64·15	35·85	20,487	2	9	11,434	18	2	31,922	0	11
	4	62·27	37·73	16,165	16	1	9,794	6	4	25,960	2	5
Birmingham and Gloucester.	1	87·56	12·44	36,983	11	3	5,249	3	9	42,232	10	10
	2	82·80	17·20	28,754	6	3	5,973	8	11	34,727	15	2
	3	79·72	20·28	34,318	15	4	8,475	8	5	41,794	3	0
	4	80·91	19·09	29,344	18	5	6,925	5	0	36 270	3	5
Bodmin and Wadebridge.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	3·28	96·72	55	1	1	1,676	4	10	1,731	5	11
	4	4·00	96·00	52	14	5	1,263	17	11	1,316	12	4
Bolton and Leigh, including Kenyon and Leigh Junction.	1	..	..	3,299	17	2	..			..		
	2	..	..	2,797	12	2	..			..		
	3	..	..	2,693	8	0	..			..		
	4	..	..	2,602	18	0	...			..		
Bolton and Preston.	1	92·06	7·94	3,525	3	10	303	14	1	3,828	17	11
	2	90·42	9·48	3,399	11	5	503	1	8	3,402	13	1
	3	75·74	24·26	3,861	7	11	1,233	14	7	5,085	2	6
	4	71·93	28·07	3,693	15	1	1,469	4	7	5,162	19	8
Brandling Junction.	1	88·78	11·22	10,919	1	0	1,379	10	2	12,298	11	2
	2	88·27	11·73	9,443	7	11	1,255	4	10	10,698	12	9
	3	88·38	11·62	9,919	0	9	1,303	17	9	11,222	18	6
	4	88·41	11·59	9,047	8	10	1,185	15	10	10,233	4	8
Canterbury and Whitstable.	1	9·10	90·90	371	9	6	3,712	1	9	4,083	11	3
	2	9·22	90·78	296	13	9	2,922	12	11	3,219	6	8
	3	10·13	89·87	432	11	6	3,839	0	2	4,271	11	8
	4	8·64	91·36	276	13	3	2,924	7	1	3,201	0	4
Chester and Birkenhead.	1	93·94	6·06	13,563	3	0	875	2	0	14,438	5	0
	2	92·87	7·13	12,550	12	6	952	15	10	13,503	8	4
	3	91·02	8·98	12,113	9	9	1,195	15	10	13,309	5	7
	4	88·79	11·21	10,031	18	0	1,267	3	11	11,299	1	11
Clarence.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	73·61	26·39	905	18	11	324	16	6	1,230	15	5
	4	70·84	29·16	727	13	8	299	12	5	1,027	6	1
Dublin and Kingstown.	1	..	..	21,387	3	8	..			..		
	2	..	..	19,101	13	8	..			..		
	3	..	..	22,057	4	0	..			..		
	4	..	..	18,988	2	10	..			..		
Dundee and Arbroath.	1	81·30	18·70	5,718	10	11	1,315	5	3	7,033	16	2
	2	76·92	23·08	4,281	2	4	1,284	8	3	5,565	10	7
	3	79·39	20·51	4,982	17	11½	1,285	16	11	6,268	14	10½
	4	70·80	29·20	3,634	5	4	1,498	15	4½	5,133	0	8½

Table No. 1 —*continued.*

Name of Railway.	Number of Return.	Per Centage Proportions.		RECEIPTS.								
		Pas-sengers.	Goods.	Passengers.			Goods.			Totals.		
				£.	s.	d.	£.	s.	d.	£.	s.	d.
Dundee and Newtyle.	1	43·96	56·04	1,637	2	4	2,098	6	1	3,735	8	5
	2	40·16	59·84	1,234	2	10½	1,839	4	3	3,073	7	1½
	3	44·17	55·83	1,522	18	6½	1,902	3	7	3,425	2	1½
	4	38·74	61·26	1,093	6	1½	1,728	13	7	2,821	19	8½
Dunfermline and Charlestown.	1	..	..	..			2,300	19	0	..		
	2	9·53	90·37	157	13	6	1,497	7	9	1,655	1	3
	3	13·76	86·24	183	6	0	1,158	8	6	1,331	14	6
	4	7·24	92·76	124	7	0	1,593	13	1	1,718	0	1
Durham and Sunderland.	1	18·30	81·70	3,026	14	3	13,513	11	5	16,540	5	8
	2	20·11	79·89	2,562	2	4	10,230	1	2	12,792	3	6
	3	19·84	80·16	3,037	4	0	12,270	12	0	15,307	16	0
	4	20·51	79·49	2,595	4	11	10,058	13	4	12,653	18	3
Durham Junction.	1	..	..	802	17	3	..			...		
	2	..	..	..			..			..		
	3	71·16	28·84	976	2	11	395	12	4	1,371	15	3
	4	61·50	38·50	982	3	7	614	14	8	1,596	18	3
Eastern Counties.	1	94·12	5·88	14,858	4	4	917	12	1	15,775	16	5
	2	90·03	9·97	13,799	7	9	1,527	18	0	15,327	5	9
	3	89·79	10·21	17,159	13	5	1,951	15	8	19,111	9	1
	4	84·99	15·01	29,782	8	0	5,258	9	11	35,040	17	11
Edinburgh and Dalkeith.	1	..	..	..			3,182	8	7	..		
	2	42·71	57·29	2,595	8	0	3,480	0	4½	6,075	8	4½
	3	64·79	35·21	3,293	6	11½	1,789	8	1½	5,082	15	0¾
	4	45·23	54·77	2,261	10	2½	2,739	0	4½	5,000	10	7
Ditto Leith Branch.	1	43·64	56·36	494	13	7½	638	17	8½	1,133	11	4
	2	33·92	66·08	329	2	11	641	1	4½	970	4	3½
	3	68·43	31·57	555	2	8½	256	2	0	811	4	8½
	4	44·40	55·60	280	17	4½	351	10	6	632	7	10½
Edinburgh and Glasgow.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	81·37	18·63	47,337	13	10	10,841	5	9	58,178	19	7
	4	68·79	31·21	33,364	4	4	15,137	11	4	48,501	15	8
Garnkirk and Glasgow.	1	28·11	71·89	2,311	19	10	5,932	16	2	8,244	16	0
	2	27·11	72·89	1,783	10	5	4,794	5	5½	6,577	15	10½
	3	22·82	77·18	1,874	4	0	6,339	7	10½	8,213	11	10½
	4	33·45	66·55	1,944	4	9	3,868	2	1	5,812	6	10
Glasgow, Paisley, and Greenock.	1	..	..	14,822	3	4	..			..		
	2	..	..	..			..			..		
	3	..	..	14,380	16	0	..			..		
	4	..	..	10,837	11	0	..			..		
Glasgow, Paisley, Kilmarnock, and Ayr.	1	..	..	22,132	16	1	..			..		
	2	75·84	24·16	17,810	13	3	5,673	3	11	23,483	17	2
	3	77·94	22·06	19,970	19	4	6,503	6	2	29,474	5	6
	4	68·75	31·25	17,376	13	8	7,898	0	6	25,274	14	2
Grand Junction.	1	80·12	19·88	181,986	1	6	45,163	17	0	227,149	18	6
	2	77·55	22·45	151,038	7	11	43,691	2	4	194,730	0	3
	3	77·42	22·58	150,983	13	0	44,033	12	4	195,017	5	4
	4	71·20	28·80	122,712	2	9	49,652	13	5	172,364	16	2
Great North of England.	1	65·30	34·70	21,640	3	8	11,499	4	10½	33,139	8	6½
	2	61·04	38·96	18,364	13	9	11,738	2	4	30,102	16	1
	3	65·56	34·44	22,096	6	4	11,607	6	7	33,703	12	11
	4	60·44	39·56	19,060	19	9	12,478	0	5	31,539	0	2
Great Western.	1	85·17	14·83	268,526	11	4	46,774	11	0	315,301	2	4
	2	81·29	18·71	236,316	7	5	54,386	13	7	290,703	1	0
	3	82·64	17·36	278,347	8	10	58,366	1	2	336,713	10	0
	4	79·80	20·20	242,909	10	8	61,479	17	3	304,389	7	11

Table No. 1—*continued.*

Name of Railway.	Number of Return.	Per Centage Proportions.		RECEIPTS.								
		Passengers.	Goods.	Passengers.			Goods.			Totals.		
				£.	s.	d.	£.	s.	d.	£.	s.	d.
Hartlepool.	1	..	..	2,331	3	10	..			..		
	2	16·11	83·89	1,811	15	9	9,433	8	2	11,245	3	11
	3	15·26	84·74	1,973	11	2	10,961	19	3¼	12,935	10	5¼
	4	17·47	82·53	1,919	8	11	9,065	14	11	10,985	3	10
Hull and Selby.	1	59·84	40·16	13,871	2	4	9,310	19	2	23,182	1	6
	2	53·64	46·36	11,073	19	9	9,382	15	5	20,456	15	2
	3	50·05	49·95	12,900	2	1	12,875	12	7	25,775	14	8
	4	43·05	56·95	10,333	18	9	13,668	4	2	24,002	2	11
Lancaster and Preston Junction.	1	92·94	7·06	10,433	19	1	791	19	10	11,225	18	11
	2	88·80	11·20	7,412	5	6	934	12	6	8,346	18	0
	3	90·54	9·46	9,546	16	10	997	16	0	10,544	12	10
	4	86·55	13·45	8,494	13	9	1,320	10	0	9,815	3	9
Leicester and Swannington.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	5·88	94·92	516	18	10	9,658	5	1	10,175	3	11
	4	5·12	94·88	411	14	8	7,632	0	9	8,043	15	5
Liverpool and Manchester.	1	59·39	40·61	73,534	14	2	50,276	0	0	123,810	14	2
	2	56·10	43·90	53,050	15	4	41,507	0	0	94,557	15	4
	3	57·66	42·34	60,891	0	8	45,064	0	0	105,955	0	8
	4	54·71	45·29	50,507	9	5	41,817	0	0	92,324	9	5
Llanelly and Llandillo.	1	3·29	96·71	49	18	0	1,464	17	8	1,514	15	8
	2	1·84	98·16	50	6	3	2,681	13	7	2,731	19	10
	3	2·29	97·71	59	15	5	2,504	6	11	2,564	2	4
	4	3·05	96·94	87	0	8	2,759	3	8	2,846	4	4
London and Birmingham.	1	80·73	19·27	319,299	1	8	76,138	0	4	395,437	2	0
	2	79·11	20·89	283,064	14	8	74,717	1	10	357,781	16	6
	3	77·80	22·20	303,109	11	2	86,512	17	9	389,622	8	11
	4	76·79	23·21	271,616	3	10	84,735	10	8	356,351	14	6
London and Blackwall.	1	..	..	22,595	18	4	..			..		
	2	..	..	..			..			..		
	3	98·26	1·74	22,793	1	10	402	18	1	23,195	19	11
	4	95·41	4·59	17,351	19	10	834	7	1	18,186	7	5
London and Brighton.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	83·31	16·69	89,463	12	5	10,684	15	7	100,148	8	0
	4	87·44	12·56	62,681	8	1	9,002	9	11	71,683	18	0
London and Croydon.	1	92·48	7·52	14,873	2	7	1,209	19	6	16,082	13	1
	2	95·80	4·20	10,543	12	4	461	0	3	11,004	12	7
	3	95·94	4·06	9,371	8	5	395	19	2	9,767	7	7
	4	96·45	3·55	6,786	4	4	249	18	3	7,036	2	7
London and Greenwich.	1	..	..	22,524	11	0	..			22,524	11	0
	2	..	..	23,671	11	6	..			23,671	11	6
	3	..	..	20,618	17	6	..			20,618	17	6
	4	..	..	21,337	3	6	..			21,337	3	6
London and South-Western.	1	84 70	15·30	124,070	19	2	22,419	14	9½	146,490	13	11½
	2	79·77	20·23	107,270	11	0½	27,153	18	8	134,224	9	8½
	3	83·34	16·66	137,463	0	7	27,487	16	1	164,950	16	8
	4	80·37	19·63	107,846	1	8	26,346	13	7	134,192	15	3
Manchester and Birmingham.	1	..	..	8,000	3	2	..			8,000	3	2
	2	..	..	8,477	7	6	..			8,477	7	6
	3	77·86	22·14	25,660	2	11	7,298	1	0	32,958	3	11
	4	80·25	19·75	32,591	11	2	8,020	12	5	40,612	3	7
Manchester, Bolton, and Bury.	1	67·15	32·85	9,969	16	11	4,878	7	0	14,848	3	11
	2	65·14	34·86	9,192	19	5	4,919	2	7	14,112	2	0
	3	62·95	37·05	8,843	6	5	5,205	8	0	14,048	14	5
	4	61·25	38·75	9,269	17	4½	5,863	19	9	15,133	17	1½

Table No. 1—*continued.*

Name of Railway.	Number of Return.	Per Centage Proportions.		RECEIPTS.								
		Passengers.	Goods.	Passengers.			Goods.			Totals.		
				£.	s.	d.	£.	s.	d.	£.	s.	d.
Manchester and Leeds.	1	63·23	36·77	81,010	1	6	47,111	17	2	128,121	18	8
	2	62·83	37·17	79,273	12	6	46,895	18	7	126,169	11	1
	3	61·87	38·13	76,925	10	0	47,419	0	3	124,344	10	3
	4	55·57	44·43	66,079	19	7	51,013	10	11	117,093	10	6
Maryport and Carlisle.	1	10·41	89·59	298	16	3	2,573	17	6	2,872	13	9
	2	8·03	91·97	244	10	3	2,800	1	7	3,044	11	10
	3	8·88	91·12	281	10	0	2,887	13	6	3,169	3	6
	4	15·52	84·48	584	2	2	3,180	4	2	3,764	6	4
Midland Counties.	1	75·46	24·54	50,284	5	5	16,355	19	10	66,640	5	3
	2	72·71	27·29	42,463	8	3	15,938	14	2	58,402	2	5
	3	73·01	26·99	47,044	14	0	17,390	16	3	64,435	10	3
	4	74·55	26·45	41,102	17	4	14,767	14	7	55,870	11	11
Monkland and Kirkintilloch.	1	..	..	..			10,328	14	10½	10,328	14	10½
	2	..	..	..			8,768	19	9	8,768	19	9
	3	..	..	..			8,849	13	9½	8,849	13	9½
	4	..	..	..			7,324	3	10	7,324	3	10
Newcastle and Carlisle.	1	40·60	59·40	17,065	5	4	24,970	16	4	42,036	1	8
	2	35·53	64·47	12,713	5	10	23,070	17	9	35,784	3	7
	3	38·22	61·78	14,967	10	4	24,194	6	11	39,161	17	3
	4	35·67	64·37	11,658	1	7	21,061	0	6	32,719	2	1
Newcastle and North Shields.	1	92·03	7·97	9.777	0	8	846	15	2	10,623	15	10
	2	90·04	9·96	8,244	6	1	912	5	5	9,156	11	6
	3	89·37	10·63	8,720	7	9	1,037	0	2	9,757	7	11
	4	85·65	14·35	6,662	4	2	1,116	2	9	7,778	6	11
Newtyle and Coupar Angus.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	54·59	45·43	288	12	7	240	5	5	528	18	0
	4	51·20	48·80	193	9	11	184	8	0	377	17	11
Northern and Eastern.	1	..	..	23,691	13	5	1	1	0	..		
	2	..	..	28,459	2	11	69	3	4	..		
	3	..	..	34,514	10	10	108	3	4	..		
	4	91·46	8·54	31,732	1	6	2,963	0	7	34,695	2	1
North Midland.	1	67·82	32·18	74,223	3	3½	35,225	17	5½	109,449	0	9
	2	..	..	59,172	0	0	..			..		
	3	65·51	34·49	70,955	6	11	37,364	7	1	108,319	14	0
	4	66·21	33·79	62,402	19	2	31,852	0	0	94,254	19	2
North Union.	1	85·32	14·68	29,937	0	3	5,152	12	5	35,089	12	8
	2	72·00	28·00	16,026	5	3	6,232	13	9	22,258	19	0
	3	77·07	22·93	19,028	10	4	5,792	0	1	24,820	10	5
	4	67·53	32·47	14,227	5	2	6,841	7	1	21,068	12	3
Paisley and Renfrew.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	66·00	34·00	390	3	4	201	0	9	591	4	1
	4	58·22	41·78	255	1	8	182	18	2½	437	19	10½
Pontop and South Shields.	1	..	..	..			..			..		
	2	..	..	848	16	4	..			..		
	3	3·92	96·08	994	2	4	24,336	13	1	25,330	15	5
	4	4·51	95·49	1,004	11	6	21,248	14	11	22,253	6	5
Preston and Wyre.	1	80·20	19·80	8,098	14	5	1,999	18	1	10,098	12	6
	2	68·69	31·31	3,174	0	3	1,446	10	0	4,620	10	3
	3	..	..	5,207	13	0	..			..		
	4	..	..	2,576	16	2	..			..		
Sheffield and Manchester.	1	..	..	..			..			..		
	2	..	..	6,677	12	11	..			6,677	12	11
	3	..	..	5,565	15	3	..			5,565	15	3
	4	88·91	11·09	8,410	13	5	1,049	11	9	9,460	5	2

Table No. 1—*continued.*

Name of Railway.	Number of Return.	Per Centage Proportions.		RECEIPTS.								
		Passengers.	Goods.	Passengers.			Goods.			Totals.		
				£.	*s.*	*d.*	*£.*	*s.*	*d.*	*£.*	*s.*	*d.*
Sheffield and Rotherham.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	87·28	12·72	5,751	8	7	826	7	2	6,577	15	9
	4	77·54	22·46	5,037	15	0	1,459	2	2	6,496	17	2
Slamannan.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	39·91	60·09	464	1	5	698	7	4½	1,162	8	9½
	4	24·59	75·41	297	10	1	912	5	10½	1,209	15	11½
South-Eastern.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	97·53	2·47	29,680	4	0	751	8	8	30,331	12	8
	4	93·79	6·21	39,656	16	8	2,636	11	6	42,293	9	2
St. Helen's and Runcorn Gap.	1	10·63	89·37	631	16	0	5,308	19	9	5,940	15	9
	2	9·29	90·71	464	7	6	4,535	18	1	5,000	5	7
	3	10·20	89·80	558	8	3	4,913	1	2	5,471	9	5
	4	6·05	93·95	464	0	6	6,214	7	1	6,678	7	7
Stockton and Darlington.	1	58·33	41·67	6,558	1	2	4,684	2	7	11,242	3	9
	2	54·80	45·20	5,599	17	5	4,618	9	3	10,218	6	8
	3	57·60	42·40	6,441	12	8	4,741	10	1	11,183	2	9
	4	53·54	46·46	5,390	10	5	4,678	6	1	10,068	16	6
Taff Vale.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	19·20	80·80	3,291	0	0	12,899	13	4	17,190	13	4
	4	15·80	84·20	2,625	3	11	13,972	0	10	16,597	4	9
Ulster.	1	94·73	5·37	5,601	7	7	317	16	7	5,919	4	2
	2	82·69	17·31	8,141	5	8	1,684	16	7	9,726	2	3
	3	77·65	22·35	8,091	16	6	2,328	19	2	10,420	15	8
	4	66·25	33·75	7,492	12	3	3,967	18	0	11,460	10	3
Wishaw and Coltness.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	1·35	98·65	76	8	8	5,604	3	2	5,680	11	10
	4	4·55	95·45	281	7	3	5,898	6	5	6,179	13	8
Whitby and Pickering.	1	32·59	67·41	794	7	6	1,643	1	1	2,437	8	7
	2	20·10	79·90	396	8	0	1,576	3	5	1,972	11	5
	3	35·42	64·58	804	2	7	1,466	8	1	2,270	10	8
	4	33·52	66·48	508	15	11	979	5	6	1,488	1	5
York and North Midland.	1	..	..	..			..			..		
	2	..	..	..			..			..		
	3	75·33	24·67	33,446	0	0	10,950	17	9	44,396	17	9
	4	66·15	33·85	23,665	0	0	12,112	8	10	35,777	8	10

NOTE.—*Dublin and Kingstown* —The receipts have not been carried out to the column of totals, as it is doubtful whether they include the four following sums received for parcels and passengers' luggage. No. 1—264*l.* 7*s.* 9*d.* No. 2—240*l.* 16*s.* 7*d.* No. 3—252*l.* 3*s.* 9*d.* No. 4—171*l.* 13*s.* 10*d.*
Northern and Eastern.—The sums in the goods column for Nos. 1, 2, and 3, are for live stock only.

TABLE No. 2.—*Passengers.*

N.B.—The letter A inserted with the name of a Railway denotes that the average distance has been computed from the rates and receipts of the Return opposite to which it is placed.

Name of Railway.	No. of Return.	First Class.			Second Class.			Third Class.			Mixed.		
		Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.
				d.			*d.*			*d.*			*d.*
Arbroath and Forfar.	1	1,423	9·89	1·9157	5,296	9·81	1·4566	46,576	8·33	1·0040	..	..	..
	2	1,215	9·51	1·9072	3,649	9·74	1·4617	36,471	7·90	1·0290	..	..	..
	3	962	9·43	1·9161	4,790	9·60	1·4543	38,430	8·26	1·0238	..	..	..
	4	1,062	9·26	1·7679	4,412	9·76	1·3235	32,172	7·98	0·8578	..	..	..
Ardrossan.	1	8,837	5·58	2·00	32,284	4·84	1·50	..	..	..	..	..	..
	2	3,749	5·48	2·00	19,923	4·57	1·50	..	..	..	..	..	..
	3	8,020	4·80	2·00	30,348	3·25	1·50	..	..	..	..	..	..
	4	5,050	4·44	2·00	21,121	2·83	1·50	..	..	..	..	..	..
Birmingham and Derby Junction.	1	..	..	..	..	..	..	..	..	..	103,165	23·44	1·94
	2	..	..	..	..	..	..	..	..	..	85,484	22·49	2·08
	3	19,824	28·43	2·87	44,097	24·56	2·03	34,246	17·40	1·44	..	..	..
	4	18,214	34·09	2·13	34,654	24·09	1·96	29,605	17·41	1·49	..	..	..
Birmingham and Gloucester.	1	50,294	24·39	3·00	117,660	19·14	2·00	25,322	19·63	1·25	..	..	..
	2	41,675	23·70	2·875	82,065	18·49	1·875	26,962	20·56	1·33	..	..	..
	3	42,501	25·44	3·00	97,269	20·11	2·00	31,580	19·14	1·065	..	..	..
	4	34,917	25·73	3·325	67,095	20·87	2·25	21,471	21·64	1·25	..	..	..
Bolton and Leigh.	1	11,009	7·32	2·44	30,154	6·98	1·77	..	..	..	..	..	..
	2	9,054	7·21	2·44	25,868	6·92	1·77	..	..	..	..	..	..
	3	7,988	7·29	2·44	27,841	6·85	1·77	..	..	..	..	..	..
	4	8,780	7·23	2·44	25,499	6·78	1·77	..	..	..	..	..	..
Bolton and Preston.	1	4,040	8·60	..	16,882	8·48	1·90	20,522	8·05	1·25	..	..	..
	2	4,101	10·19	2·75	15,107	9·80	1·75	22,901	9·53	1·25	..	..	..
	3	4,380	10·41	2·75	17,652	10·01	1·75	26,426	9·37	1·25	..	..	..
	4	4,651	..	2·75	15,441	..	1·75	26,840	..	1·25	..	..	..
Brandling Junction.	1	24,827	..	..	296,860	..	..	..	..	..	..	7·61	1·065
	2	24,346	..	..	241,466	..	..	265,812	..	..	..	3·76	1·143
	3	22,777	..	..	263,087	..	..	..	..	..	..	7·21	1·143
	4	46,573	7·05	1·344	228,838	6·87	1·036	..	..	..	..	..	..

Canterbury and Whitstable.	1	..	..	..	15,417	5·82	1·00	..	..	..	..	..	..
	2	..	..	..	12,215	5·06	1·00	..	..	..	..	..	..
	3	..	..	..	17,568	5·76	1·00	..	..	..	..	..	..
	4	..	..	..	11,535	5·70	1·00	..	..	..	..	..	..
Chester and Birkenhead.	1	19,547	12·00	2·90	39,652	12·00	2·00	69,534	12·00	1·25	*55,689	*12·00	*0·83
	2	17,256	12·25	2·90	38,892	12·51	2·06	69,772	12·46	1·25	*7,070	*12·42	*0·83
	3	15,740	12·10	2·90	36,782	12·59	2·00	75,082	12·53	1·25	..	..	..
	4	13,232	12·73	2·90	44,992	12·67	2·00	41,392	12·60	1·25	..	..	..
Clarence.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	2,010	14·92	..	9,128	12·21	..	..	..	..	..	..	1·00
	4	1,983	13·36	..	7,225	12·00	..	..	..	..	..	..	1·00
Dublin and Kingstown.	1	12,782	..	2·00	466,359	..	1·66	383,081	..	1·00	..	..	..
	2	12,795	..	2·00	430,386	..	1·66	334,299	..	1·00	..	..	..
	3	27,558	..	2·00	451,873	..	1·66	396,020	..	1·00	..	..	..
	4	41,653	..	2·00	442,291	..	1·66	335,644	..	1·00	..	..	..
Dundee and Arbroath.	1	5,705	11·35	2·00	28,981	8·35	1·50	123,423	..	1·00	..	..	..
	2	4,890	11·55	2·00	19,100	8·97	1·50	87,413	..	1·00	..	..	..
	3	4,660	..	2·00	22,609	..	1·50	112,832	..	1·00	..	..	..
	4	4,566	..	2·00	18,672	..	1·50	67,701	..	1·00	..	..	..
Dundee and Newtyle.	1	473	9·34	1·842	5,754	7·29	1·572	29,131	9·11	1·181	..	..	..
	2	417	9·78	1·842	4,662	6·71	1·572	21,225	9·27	1·181	..	..	..
	3	616	9·67	1·794	6,633	7·36	1·615	24,773	9·50	1·173	..	..	..
	4	462	9·80	1·788	5,188	7·47	1·562	17,140	9·43	1·197	..	..	..
Dunfermline and Charlestown.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	6,819	3·5	1·50	..	..	..	..	..	..	..	..	..
	3	8,079	3·5	1·50	..	..	..	..	..	..	..	..	..
	4	5,412	3·5	1·50	..	..	..	..	..	..	..	..	..
Durham Junction.	1	..	..	1·50	..	..	1·00	..	..	..	32,753	4·12	..
	2	..	..	1·50	..	..	1·00	..	..	..	32,697	4·16	..
	3	8,637	4·44	1·55	28,846	4·17	1·39	..	..	..	..	..	..
	4	9,754	4·42	1·87	25,789	4·20	1·43	..	..	..	..	..	..

* Fourth Class.

TABLE NO. 2.—*continued.*

Name of Railway.	No. of Return.	First Class.			Second Class.			Third Class.			Mixed.		
		Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.
				d.			*d.*			*d.*			*d.*
Durham and Sunderland.	1	..	..	..	..	..	..	..	..	..	75,533	7·95	1·20
	2	..	..	..	..	..	..	..	..	..	65,550	7·95	1·20
	3	..	..	..	..	..	..	..	..	..	80,204	8·00	1·20
	4	..	..	..	..	..	..	..	..	..	68,054	8·00	1·20
Eastern Counties.	1	27,373	11·51	2·65	64,511	11·24	1·87	109,793	8·54	1·46	..	..	..
	2	28,539	11·48	2·65	52,881	11·33	1·87	101,059	8·84	1·46	..	..	..
	3	28,859	11·52	2·65	66,926	11·82	1·87	129,304	8·72	1·46	..	..	..
	4	36,397	21·93	2·70	69,581	19·91	2·00	82,527	13·92	1·50	..	..	..
Edinburgh and Dalkeith.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	91,302	6·47	0·9096	22,267	3·47	0·9088	..	..	..	..	..	..
	3	131,907	6·37	0·7992	39,385	3·43	0·8616	..	..	..	..	..	..
	4	95,779	6·32	0·8016	19,752	3·46	0·8352	..	..	..	..	..	..
Ditto Leith Branch.	1	..	..	..	33,516	3·36	1·032	..	..	..	..	..	..
	2	..	..	..	24,050	3·23	0·9953	..	..	..	..	..	..
	3	..	..	..	43,512	2·94	1·0368	..	..	..	..	..	..
	4	..	..	..	22,538	3·21	0·912	..	..	..	..	..	..
Edinburgh and Glasgow.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	51,060	33·65	2·09	84,061	27·17	1·56	205,134	22·65	0·85	..	..	..
	4	41,043	33·75	2·09	60,249	24·23	1·56	154,816	20·11	0·85	..	..	..
Garnkirk and Glasgow.	1	2,920	9·21	1·277	77,566	7·83	0·856	..	..	..	..	..	..
	2	2,969	9·69	1·218	53,444	8·15	0·901	..	..	..	..	..	..
	3	3,362	9·46	1·089	61,428	8·21	0·820	..	..	..	..	..	..
	4	4,976	9·26	1·010	68,222	8·22	0·748	..	..	..	..	..	..
Glasgow, Paisley, and Greenock.	1	51,917	19·70	..	183,743	16·31	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	33,572	..	..	95,561	..	..	220,378	..	..	..	..	..
	4	26,583	21·10	..	70,047	14·52	..	168,955	..	..	..	..	..

Glasgow, Paisley, Kilmarnock, and Ayr.	1	39,574	18·33	1·875	143,092	15·12	1·25	133,782	10·65	0·875	..	..	..
	2	30,071	..	1·875	112,942	..	1·25	159,023	..	0·875	..	12·24	..
	3	30,546	..	1·875	136,974	..	1·25	231,793	..	0·875	..	..	..
	4	28,719	..	1·875	133,449	..	1·25	255,593	..	0·875	..	..	..
Grand Junction.	1	153,497	..	..	78,182	..	..	30,208	..	..	..	58·14	..
	2	130,367	..	..	73,030	..	..	30,685	..	..	..	56·52	..
	3	111,997	59·41	..	78,983	37·79	..	24,174	73·55	..	..	..	..
	4	91,004	59·58	..	63,819	36·35	..	18,715	76·68	..	..	..	..
Ditto Manchester and Birmingham Traffic.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	14,843	48·84	..	6,332	50·66	..	5,288	50·10	..	..	..	..
	4	20,288	47·86	..	7,892	40·91	..	5,485	49·10	..	..	..	..
Great North of England.	1	17,195	35·61	3·20	34,320	27·47	2·13	30,576	21·01	1·33	..	..	..
	2	14,832	36·02	3·20	25,486	27·18	2·13	37,621	19·13	1·33	..	..	..
	3	16,248	35·20	3·20	38,916	27·61	2·13	25,574	20·67	1·33	..	..	..
	4	14,015	33·92	3·47	29,233	27·59	2·40	20,929	19·23	1·60	..	..	..
Great Western.(A).	1	201,964	44·04	3·031	634,638	24·26	2·085	45,517	44·14	1·183	..	..	..
	2	204,132	42·92	3·031	482,249	24·81	2·085	50,190	44·14	1·183	..	..	..
	3	199,097	45·77	3·031	597,690	26·24	2·085	72,656	36·02	1·183	..	..	..
	4	195,532	45·12	3·031	469,081	26·38	2·085	60,514	38·41	1·183	..	..	..
Hartlepool.	1	12,326	5·68	2·10	36,011	6·87	1·575	..	..	..	..	..	..
	2	10,084	5·98	2·10	26,962	6·63	1·575	1,732	8·21	..	..	..	..
	3	13,572	..	..	21,970	..	..	18,378	..	..	..	..	..
	4	12,134	..	..	20,182	..	..	19,260	..	..	..	..	..
Hull and Selby.	1	19,887	19·91	2·33	27,656	19·98	1·80	76,251	19·91	0·95	..	..	..
	2	16,821	22·46	2·07	17,480	23·55	1·40	67,911	18·12	1·02	..	..	..
	3	15,892	23·34	2·03	22,466	24·86	1·22	81,176	18·22	1·01	..	..	..
	4	13,742	22·66	2·07	18,711	24·51	1·62	48,116	17·08	1·27	..	..	..
Lancaster and Preston.	1	25,592	19 31	3·00	14,097	13·92	1·80	31,779	14·47	0·90	..	..	..
	2	18,024	19·23	3·00	11,560	12·77	1·80	29,262	14·24	0·90	..	..	..
	3	23,187	19·18	3·00	12,637	17·10	1·80	21,212	14·67	0·90	..	..	..
	4	17,931	19·09	3·00	11,822	18·22	1·80	23,913	12·42	0·90	..	..	..

TABLE, No. 2—*continued.*

Name of Railway.	No. of Return.	First Class.			Second Class.			Third Class.			Mixed.		
		Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number	Average Distance.	Rate.	Number.	Average Distance.	Rate.
				d.			*d.*			*d.*			*d.*
Leeds and Selby.	1	16,175	5·74	..	26,478	6·82	..	45,663	6·48	..	..	..	..
	2	13,165	5·75	..	17,463	6·34	..	38,769	6·55	..	..	..	..
	3	..	..	..	..	..	..	..	..	..	..	..	..
	4	..	..	..	..	..	..	..	..	..	..	..	..
Liverpool and Manchester.	1	172,943	21·01	2·36	217,380	21·91	1·71	..	..	..	..	..	..
	2	132,189	20·09	2·36	171,911	18·92	1·77	..	..	..	..	..	..
	3	147,011	20·85	2·36	197,572	19·61	1·77	..	..	..	..	..	..
	4	132,977	20·95	2·36	154,853	18·62	1·77	..	..	..	..	..	..
London and Birmingham.	1	161,044	77·71	3·214	212,987	57·55	2·143	39,241	60·73	1·50	..	..	..
	2	148,842	76·25	3·214	180,277	55·96	2·143	43,412	62·36	1·50	..	..	..
	3	145,130	76·09	3·214	210,967	57·79	2·143	51,743	64·31	1·50	..	..	..
	4	142,705	74·76	3·214	175,726	57·66	2·143	42,353	61·26	1·50	..	..	..
London and Brighton.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	107,386	35·80	3·50	125,805	27·21	2·25	61,221	10·08	1·50	..	..	..
	4	88,721	30·20	3·50	71,215	24·79	2·25	65,785	13·05	1·50	..	..	..
London and Croydon.	1	58,143	6·19	3·03	170,935	5·53	2·30	37,227	5·19	1·00	..	..	..
	2	48,501	10·19	2·84	106,883	7·37	2·07	29,171	5·70	1·26	..	..	..
	3	33,011	7·96	2·35	105,859	6·80	2·00	35,102	5·89	0·89	..	..	..
	4	29,393	7·81	2·45	84,609	6·60	1·90	..	..	..	..	..	..
London and South-Western.	1	109,838	40·56	3·20	202,727	29·07	2·30	21,290	57·11	1·20	..	..	..
	2	112,153	38·41	3·20	180,679	26·51	2·30	26,750	55·18	1·20	..	..	..
	3	121,125	42·35	3·125	221,246	28·60	2·30	40,356	59·24	1·20	..	..	..
	4	111,926	38·21	3·125	178,800	26·08	2·30	31,171	57·72	1·20	..	..	..
Manchester and Birmingham, (local traffic.)	1	8,115	4·83	3·00	25,894	4·08	2·40	257,681	4·86	1·20	..	..	..
	2	8,372	6·04	3·00	33,824	6·89	2·33	207,237	5·04	1·25	..	..	..
	3	16,078	10·47	3·00	46,473	8·84	2·33	179,876	6·09	1·25	..	..	..
	4	21,809	9·04	3·00	61,995	8·45	2·33	215,084	6·32	1·25	..	..	..

Manchester and Birmingham, (long traffic.)	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	15,811	27·39	..	8,576	25·86	..	5,033	..	..	..	..	..
	4	22,893	27·65	..	12,605	26·47	..	6,168	29·01	..	..	..	..
Manchester, Bolton, and Bury.	1	20,294	9·41	2·890	92,634	8·42	1·801	39,410	8·93	1·244	..	..	..
	2	19,893	9·39	3·017	91,992	8·52	1·817	20,294	8·26	1·291	..	..	..
	3	18,312	9·48	2·944	86,613	8·65	1·778	24,300	8·95	1·231	..	..	..
	4	19,721	9·49	2·993	86,504	8·40	1·791	33,183	8·66	1·216	..	..	..
Manchester and Leeds.	1	47,467	28·43	3·00	155,528	22·26	2·00	375,118	11·70	1·00	..	..	..
	2	42,353	26·15	3·00	134,846	21·12	2·00	371,984	10·83	1·00	..	..	..
	3	44,786	26·98	3·00	141,885	22·52	2·00	412,577	11·28	1·00	..	..	..
	4	40,128	24·78	3·00	130,941	20·69	2.00	381,570	11·14	1·00	..	..	..
Maryport and Carlisle.	1	..	..	..	..	..	..	..	..	..	7,471	6·31	1·50
	2	..	..	..	..	..	..	..	..	..	6,087	6·34	1·50
	3	341	7·77	2·1666	6,661	6·60	1·4166	..	..	..	..	..	..
	4	842	8·51	2·1000	10,664	7·59	1·6000	..	..	..	..	..	..
Midland Counties.	1	51,372	..	3·00	129,821	..	2·00	112,505	..	1·00	..	..	..
	2	44,860	..	3·00	101,874	..	2·00	82,027	..	1·00	..	..	..
	3	44,626	22·81	3·00	119,282	22·84	2·00	97,247	22·86	1·00	..	..	..
	4	40,793	21·00	3·00	97,984	21·00	2·00	74,852	21·00	1·00	..	..	..
Newcastle and Carlisle.	1	12,747	..	2·20	146,524	..	1·60	..	..	..	..	..	..
	2	9,610	..	2·20	112,867	..	1·10	..	..	..	..	..	..
	3	9,742	..	2·20	132,984	..	1·70	..	..	..	..	..	..
	4	8,897	..	2·20	101,406	..	1·70	..	..	..	..	..	..
Newcastle and North Shields. (A)	1	..	..	..	..	..	..	..	..	..	436,382	5·20	1·0303
	2	..	..	..	..	..	..	..	..	..	348,168	4·92	1·1666
	3	..	..	..	..	..	..	..	..	..	371,522	5·63	1·0000
	4	..	..	..	..	..	..	..	..	..	318,299	6·69	0·7500
Newtyle and Coupar Angus.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	1,407	4·09	1·7038	10,628	4·69	1·1453	..	..	..	..	..	..
	4	994	3·86	1·6768	7,135	4·89	1·1463	..	..	..	..	..	..

TABLE NO. 2—*continued.*

Name of Railway.		No. of Return.	First Class.			Second Class.			Third Class.			Mixed.		
			Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.	Number.	Average Distance.	Rate.
					d.			*d.*			*d.*			*d.*
North Midland.		1	70,178	40·27	3·00	132,222	21·86	2·00	268,037	9·72	1·00	..	..	..
		2	65,260	25·43	3·00	106,174	19·32	2·00	223,972	13·33	1·50	..	..	..
		3	73,960	26·32	3·00	156,563	15·33	2·00	267,331	12·77	1·50	..	..	..
		4	57,183	..	3·00	124,259	..	2·00	198,708	..	1·50	..	..	..
North Union.		1	61,203	..	2·43	55,518	..	1·62	..	..	..	..	17·27	..
		2	44,814	..	2·43	43,999	..	1·62	..	..	..	..	16·52	..
		3	49,636	..	2·43	50,893	..	1·62	..	..	..	..	17·05	..
		4	39,492	..	2·43	42,289	..	1·62	..	..	..	..	16·18	..
Northern and Eastern.		1	..	..	2·338	..	..	1·774	..	..	1·158	263,735	10·44	..
		2	..	..	2·346	..	..	1·787	..	..	1·212	186,186	13·75	..
	(A)	3	64,368	21·28	2·174	124,288	19·47	1·655	51,681	13·92	1·109	..	..	..
		4	74,411	19·45	2·174	112,242	16·74	1·655	50,418	13·08	1·109	..	..	..
Pontop and South Shields.		1	..	..	..	..	..	..	..	..	..	..	..	..
		2	..	..	..	..	..	..	..	..	..	33,869	5·35	1·10
		3	8,791	5·41	1·43	29,413	5·72	1·07	..	..	..	..	..	..
		4	10,223	5·44	1·49	26,265	5·31	1·07	..	..	..	..	..	..
Preston and Wyre.		1	16,228	17·85	2·25	20,309	15·30	1·75	56,385	10·30	1·25	..	..	..
		2	5,640	18·07	2·25	6,045	16·54	1·75	23,576	11·99	1·25	..	..	..
		3	10,300	19·65	2·25	10,320	18·34	1·75	30,770	11·61	1·25	..	..	..
		4	4,764	19·40	2·25	4,911	15·86	1·75	21,573	10·06	1·25	..	..	..
Sheffield and Manchester.		1	5,321	3·59	3·00	6,465	3·59	2·00	41,539	3·35	1·50	..	..	..
		2	19,808	3·98	2·25	27,125	3·98	1·75	177,659	4·00	1·25	..	..	..
		3	12,383	4·06	..	30,538	4·06	..	115,800	4·06	..	..	..	..
		4	21,070	4·13	..	54,146	4·13	..	269,078	4·02	..	..	..	..
Sheffield and Rotherham.		1	..	..	..	..	..	..	..	..	..	..	..	..
		2	..	..	..	..	..	..	..	..	..	..	..	..
	(A)	3	4,116	5·00	2·40	581	5·00	1·80	151,729	5·00	1·20	62,261	5·00	..
		4	985	5·00	2·40	2,454	5·00	1·80	133,685	5·00	1·20	48,110	5·00	..

Slamannan.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	289	10·04	1·94	8,588	9·55	1·17	..	..	..	..	..	..
	4	209	8·74	1·43	5,988	8·34	1·35	..	..	..	..	..	..
South-Eastern.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	34,308	37·25	2·33	64,552	30·40	1·6363	34,798	20·02	0·862	..	..	..
	4	45,434	42·98	2·27	54,640	36·46	1·5000	66,056	25·60	0·875	..	..	..
St. Helens' and Runcorn Gap.	1	..	..	..	..	..	..	..	..	..	14,786	2·16	4·75
	2	..	..	..	..	..	..	..	..	..	12,548	2·07	4·28
	3	..	..	..	..	..	..	..	..	..	14,043	2·02	4·70
	4	..	..	..	..	..	..	..	..	..	11,845	2·25	4·17
Stockton and Darlington.	1	17,364	8·75	2·00	144,558	5·78	1·50	2,385	9·59	1·00	..	..	..
	2	16,971	7·04	2·00	109,736	5·71	1·50	1,742	9·98	1·00	..	..	..
	3	18,497	8·06	2·00	116,638	5·79	1·50	1,543	10·06	1·00	..	..	..
	4	18,902	8·10	2·00	96,050	5·71	1·50	1,143	10·30	1·00	..	..	..
Taff Vale.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	3,559	15·70	2·50	22,387	10·89	2·00	17,966	9·17	1·50	..	..	..
	4	3,254	15·81	2·47	14,531	10·73	1·90	15,580	9·13	1·45	..	..	..
Ulster.	1	13,261	..	1·65	141,226	..	1·20	23,007	..	0·80	..	..	..
	2	14,861	..	1·44	66,938	..	0·96	147,908	..	0·64	..	..	..
	(A) 3	13,082	14·22	1·44	116,880	10·29	0·96	76,879	10·43	0·64	..	..	..
	4	13,028	14·92	1·44	128,892	10·33	0·96	30,644	11·35	0·64	..	..	..
Whitby and Pickering.	1	2,753	17·47	2·25	5,017	11·41	1·75	..	..	..	..	..	..
	2	2,264	15·99	2·25	3,407	12·97	1·75	..	..	..	..	..	..
	3	3,084	13·90	2·00	4,036	11·97	1·50	..	..	..	..	..	..
	4	2,321	13·90	2·00	2,614	6·40	1·50	..	..	..	..	..	..
York and North Midland.	1	..	..	..	..	..	..	..	..	..	..	..	..
	2	..	..	..	..	..	..	..	..	..	..	..	..
	3	40,618	21·52	3·00	68,932	20·25	2·00	111,582	16·06	1·25	..	..	..
	4	32,972	19·05	2·88	54,427	17·66	2·17	78,239	13·96	1·38	..	..	..

NOTE.—*Edinburgh and Dalkeith.*—The rates for the second class appear higher than those of the first; the former were travellers on the passages of the line connected with the Leith Branch.

⁂ The Tables analysing the traffic in cattle and goods will appear in the next number of the Journal.

In the course of this brief sketch I have been desirous of directing the attention of the Society to certain peculiar features of the tables, as illustrative of their utility in indicating the accession of some new stimulating or depressing cause, which it may be interesting and useful to investigate. To go further than briefly to point out some of the most prominent of such variations, would be a departure from my task.

As my principal object was to call attention to the official returns of railway traffic in reference to their capability of adaptation to the purpose of furnishing information in *local* statistics, I have, with the exception of the remarks on the average rates of charge, left untouched the general results of the railway system. These have been given, as deduced from the same returns, by Mr. Porter, in the paper already alluded to, where they are stated with the perspicuity that characterizes the works of that able statist.

January 17, 1845.

Statistics of the Educational Institutions of the East India Company in India. By LIEUTENANT-COLONEL W. H. SYKES, F.R.S.

[*Continued from page* 147.]

HISTORICAL QUESTIONS.—*Senior.*

1. Give some account of the Gracchi—their descent and character, and the state of parties in Rome at the time they flourished.

2. What was the Mithridatic war, and who were the principal Roman Generals engaged?

3. State (1) the origin of the Achæan league, (2) the principles on which it was established, (3) its termination, and (4) the chief characters who figured in it.

4. Give some account, with dates, of the Battles of the Metaurus, Mycale, Arginusæ, Delium, Chæronea, and Mutina.

5. At what time, and under what Emperors, did the final division of the Roman Empire into East and West take place? and what countries were comprehended in each division?

6. Give the line of policy pursued by Henry VII. in his Internal Government, and the means by which he carried it into effect.

7. What events led to the English wars with France in the 13th and 14th centuries? How did the English finally lose possession of their conquests.

8. State the rise and progress of the representation of the Commons in England.

9. Mention some events in the lives of Sebaktagin, Nadir Shah, Seraji, Mahomed Toglak, and Holkar.

10. Describe the religious opinions, political designs, and revenue system of Akbar.

11. When did the Romans first become acquainted with the Oriental mode of warfare, and in what respects did it principally differ from their own?

12. What are the earliest Historical Records among uncivilized nations? and what are the changes which they usually undergo before we arrive at the period of true History? Illustrate this by instances from the Histories of Greece and Rome, of India, and of Europe.

GEOMETRY.—*Senior.*

1. To a given straight line apply a parallelogram, which shall be equal to a given triangle, and have one of its angles equal to a given rectilineal angle.

2. If a straight line be divided into any two parts, the square on the whole is equal to the sum of the squares on the parts with twice the rectangle contained by the parts.